

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/764,595	01/23/2004	Douglas Hamrick	8981	
7590 02/16/2005		EXAMINER		
DOUGLAS HAMRICK			HAN, JASON	
7859 Bluefield St. Canal Wincester, OH 43110			ART UNIT	PAPER NUMBER
Canal Wincoster, Off 43770			2875	
		DATE MAILED: 02/16/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

Bamail

	Application No.	Applicant(s)				
Office Anthor Down on	10/764,595	HAMRICK, DOUGLAS				
Office Action Summary	Examiner	Art Unit				
	Jason M Han	2875				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely fixed after SIX (8) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (8) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term edjustment. See 37 CFR 1.704(b).						
Status		,				
1)⊠ Responsive to communication(s) filed on <u>23 January 2004</u> .						
	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-38</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) 1-38 is/are rejected.						
7) Claim(s) 15 is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	B Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
) ☑ Notice of References Cited (PTO-892)) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summan Paper No(s)/Mail C 5) Notice of Informal I 6) Other:	· • • • • • • • • • • • • • • • • • • •				

Art Unit: 2875

Page 2

DETAILED ACTION

The following claims have been rejected in light of the specification, but rendered the broadest interpretation by the examiner [MPEP 2111].

Claim Objections

1. Claim 15 is objected to because of the following informalities:

Typographical error – In line 5 of the claim, applicant should rewrite to read "monochrome green LEDs". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 1. Claims 1-2, 5, and 8-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gleason et al. (U.S. Patent 5446440).
- 2. With regards to Claim 1, Gleason discloses an exit sign including:
 - a housing [Figure 2: (52)];
 - a plurality of LEDs emitting red light that are mounted in mutual lighting association within the housing [Column 6, Lines 10-14];
 - means for selective activation of the plurality of LEDs [Column 6, Lines 32-34];

Art Unit: 2875

- means for passing light in the form of indicia [Figure 2: (56, 58)];

 means for optically diffusing emitted light disposed within the housing and juxtaposed to the plurality of LEDs and means for passing light [Column 6, Lines 10-14];

Page 3

- DC circuitry [Figure 6] in operative electrical connection with the plurality of LEDs; and
- a source of DC electrical power activating the DC circuitry [Column 8,
 Lines 8-11].
- 3. With regards to Claim 2, Gleason reads upon all positively cited structural limitations, wherein a plurality of LEDs is disclosed [Column 6, Lines 7-14].
- 4. With regards to Claim 5, Gleason discloses the means for optically diffusing the light being an optical diffuser, whereby emitted light is passed through a red filter panel/diffuser in providing a uniform red glow [Column 6, Lines 10-14].
- 5. With regards to Claim 8, Gleason discloses the indicia including four independent letters that form the word "EXIT" [Figure 2: (56)].
- 6. With regards to Claim 9, Gleason discloses the indicia including at least one symbol indicating an exit [Figure 2: (56, 58)].
- 7. With regards to Claim 10, Gleason discloses the at least one symbol being a chevron arrow [Figure 2: (58)].
- 8. With regard to Claims 11-12, Gleason discloses the means for selective activation being a switch [Figure 6: (178)].

Art Unit: 2875

Page 4

- With regards to Claim 13, Gleason discloses a battery means [Figure 6:
 (212)] for providing emergency DC power to the plurality of LEDs.
- 10. With regards to Claim 14, Gleason discloses means for providing emergency light including a plurality of monochrome LEDs, whereby means for producing emergency light being in electrical connection to the battery means [Figure 6; Column 9, Lines 6-32].
- 11. Claims 15-16 and 19-26 are rejected under 35 U.S.C. 102(b) as being anticpated by Schwartz (U.S. Patent 5448843).
- 12. With regards to Claim 15, Schwartz discloses an illuminated sign including:
 - a housing [Figure 1: (11)];
 - a plurality of monochrome red LEDs and a plurality of monochrome green LEDs that are mounted in mutual lighting association in the housing [Column 6, Lines 24-26];
 - means for selective activation of the plurality of monochrome red LEDs
 or plurality of green LEDs [Figure 5; Column 6, Lines 39-41];
 - means for passing light in the form of indicia symbolizing an exit [Figure 1: (13-18)];
 - means for optically diffusing emitted light disposed within the housing and juxtaposed to the plurality of monochrome red LEDs, monochrome green LEDs, and means for passing light [Figures 3-4: (31); Column 6, Lines 3-6];

- DC circuitry in operative electrical connection with the plurality of monochrome red and green LEDs [Figure 5; Column 6, Line 66 – Column 7, Line 2; Column 7, Lines 25-37]; and
- a source of DC electrical power activating the DC circuitry [Column 7;
 Lines 25-37].
- 13. With regards to Claim 16, Schwartz reads upon all positively cited structural limitations, wherein a plurality of monochrome red LEDs and a plurality of monochrome green LEDs are disclosed [Column 6, Lines 24-26].
- 14. With regards to Claim 19, Schwartz discloses the indicia including four independent letters forming the word "EXIT" [Figure 1: (13-16)].
- 15. With regards to Claim 20, Schwartz discloses the indicia including at least one symbol indicating an exit [Figure 1: (13-18)].
- 16. With regards to Claim 21, Schwartz discloses the one symbol being a chevron arrow [Figure 1: (17-18)].
- 17. With regards to Claim 22, Schwartz discloses the means for selective activation of the plurality of LEDs being a switch [Column 7, Lines 3-25].
- 18. With regards to Claim 23, Schwartz discloses the switch simultaneously activating both the red and green plurality of LEDs [Column 7, Lines 3-25].
- 19. With regards to Claim 24, Schwartz discloses the means for optically diffusing the light being an optical diffuser [Figures 3-4: (31); Column 6, Lines 3-6].
- 20. With regards to Claim 25, Schwartz discloses battery means to power the plurality of monochrome red and green LEDs [Column 7, Lines 29-30].

- 21. With regards to Claim 26, Schwartz discloses means for providing emergency light including a plurality of monochrome LEDs, whereby the means for producing emergency light is electrically connected to the battery means [Column 7, Line 61 Column 8, Line 10].
- 22. Claims 27-28 and 31-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwartz (U.S. Patent 5448843).
- 23. With regards to Claim 27, Schwartz discloses an illuminated sign including:
 - a housing [Figure 1: (11)];
 - a plurality of bicolor red and green LEDs that are mounted in mutual lighting association in the housing [Column 6, Lines 30-38];
 - means for selective activation of the plurality of bicolor red and green
 LEDs [Figure 5; Column 6, Lines 39-41];
 - means for passing light in the form of indicia symbolizing an exit
 [Figure 1: (13-18)];
 - means for optically diffusing emitted light disposed within the housing, and juxtaposed to the plurality of bicolor red and green LEDs as well as to the means for passing light (Figures 3-4: (31); Column 6, Lines 3-6);
 - DC circuitry in operative electrical connection with the plurality of bicolor red and green LEDs [Figure 5; Column 6, Line 66 – Column 7, Line 2; Column 7, Lines 25-37]; and

Art Unit: 2875

Page 7

a source of DC electrical power activating the DC circuitry [Column 7;
 Lines 25-37].

- 24. With regards to Claim 28, Schwartz reads upon all positively cited structural limitations, wherein a plurality of bicolor red and green LEDs are disclosed [Column 6, Lines 30-38].
- 25. With regards to Claim 31, Schwartz discloses the indicia including four independent letters forming the word "EXIT" [Figure 1: (13-16)].
- 26. With regards to Claim 32, Schwartz discloses the indicia including at least one symbol indicating an exit [Figure 1: (13-18)].
- 27. With regards to Claim 33, Schwartz discloses the one symbol being a chevron arrow [Figure 1: (17-18)].
- 28. With regards to Claim 34, Schwartz discloses the means for selective activation of the plurality of bicolor LEDs being a switch [Column 7, Lines 3-25].
- 29. With regards to Claim 35, Schwartz discloses the switch simultaneously activating both the red and green plurality of LEDs [Column 7, Lines 3-25].
- 30. With regards to Claim 36, Schwartz discloses the means for optically diffusing the light being an optical diffuser [Figures 3-4: (31); Column 6, Lines 3-6].
- 31. With regards to Claim 37, Schwartz discloses battery means to power the plurality of bicolor red and green LEDs [Column 7, Lines 29-30].
- 32. With regards to Claim 38, Schwartz discloses means for providing emergency light including a plurality of monochrome LEDs, whereby the means

for producing emergency light is electrically connected to the battery means [Column 7, Line 61 – Column 8, Line 10].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 33. Claims 3-4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleason et al. (U.S. Patent 5446440) as applied to Claim 1 above, and further in view of Schwartz (U.S. Patent 5448843).
- 34. With regards to Claim 3, Gleason discloses the claimed invention as cited above, but does not specifically teach the plurality of LEDs including a plurality of monochrome red LEDs and a plurality of monochrome green LEDs.

Schwartz teaches, "According to the code, the letter strokes and background areas should be illuminated in contrasting colors. This is easily accomplished by using commonly available red and green LEDs for the stroke and background illumination, respectively. In such a case, the troughs of the letter strokes will be filled with red-tinted resin, and the background areas filled with green-tinted resin [Column 6, Lines 21-29; underline added by examiner for emphasis]."

It would have been obvious to modify the exit sign of Gleason to incorporate the plurality of red and green LEDs so as to create a more

ostentatious display, whereby one color may be emitted during normal occasions and a different color during emergency situations.

- 35. With regards to Claim 4, Gleason in view of Schwartz discloses the claimed invention as cited above. In addition, Swhwartz teaches, "The letter drive (59) and background drive (58) circuits may be as simple as voltage regulators, or may include plurality switching capability for use with <u>bi-color LEDs</u>, or means for switching between two color strings, if is desired to flash alternate colors in an emergency [Column 7, Line 65 Column 8, Line 2; underline added for emphasis]."
- 36. With regards to Claim 6, Gleason in view of Schwartz discloses the claimed invention as cited above. In addition, Schwartz teaches a means for passing light in the form of indicia including a non-transparent stencil defining light passageway openings forming the indicia [Column 1, Lines 35-39].
- 37. With regards to Claim 7, Gleason in view of Schwartz discloses the claimed invention as cited above. In addition, Schwartz teaches a means for passing light in the form of indicia including a translucent stencil having non-transparent areas and transparent areas, whereby the transparent areas form the indicia through which the light passes through to identify the indicia [Column 1, Lines 35-39].
- 38. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz (U.S. Patent 5448843) as applied to Claim 15 above.

39. With regards to Claim 17, Schwartz discloses the claimed invention as cited above, but does not specifically teach within the same embodiment a non-transparent stencil.

However, Schwartz does teach in the prior art a means for passing light in the form of indicia including a non-transparent stencil defining light passageway openings forming the indicia [Column 1, Lines 35-39].

It would have been obvious to modify the exit sign of Schwartz to incorporate the non-transparent stencil of the prior art in order to simplify manufacturing whereby a simple stencil plate is used, and may further provide for a more compact design. Such a configuration is commonly known within the art and is considered by the examiner to be an obvious engineering decision whereby functional equivalence is maintained by virtue of similar results (e.g. the illumination of the word "EXIT").

In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a non-transparent stencil, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

40. With regards to Claim 18, Gleason in view of Schwartz discloses the claimed invention as cited above. In addition, Schwartz teaches a means for passing light in the form of indicia including a translucent stencil having non-transparent areas and transparent areas, whereby the transparent areas form the

indicia through which the light passes through to identify the indicia [Column 1, Lines 35-39].

- 41. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz (U.S. Patent 5448843) as applied to Claim 27 above.
- 42. With regards to Claim 29, Schwartz discloses the claimed invention as cited above, but does not specifically teach within the same embodiment a non-transparent stencil.

However, Schwartz does teach in the prior art a means for passing light in the form of indicia including a non-transparent stencil defining light passageway openings forming the indicia [Column 1, Lines 35-39].

It would have been obvious to modify the exit sign of Schwartz to incorporate the non-transparent stencil of the prior art in order to simplify manufacturing whereby a simple stencil plate is used, and may further provide for a more compact design. Such a configuration is commonly known within the art and is considered by the examiner to be an obvious engineering decision whereby functional equivalence is maintained by virtue of similar results (e.g. the illumination of the word "EXIT").

In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a non-transparent stencil, since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Art Unit: 2875

Page 12

43. With regards to Claim 30, Gleason in view of Schwartz discloses the claimed invention as cited above. In addition, Schwartz teaches a means for passing light in the form of indicia including a translucent stencil having non-transparent areas and transparent areas, whereby the transparent areas form the indicia through which the light passes through to identify the indicia [Column 1, Lines 35-39].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art pertinent to the current application, but are not considered exhaustive:

US Patent 4271408 to Teshima et al;
US Patent 4435743 to Plumly;
US Patent 5018290 to Kozek et al;
US Patent 5027258 to Schoniger et al;

US Patent 5075826 to Lan; US Patent 5276591 to Hegarty;

US Patent 5303124 to Wrobel; US Patent 5365411 to Rycroft et al;

US Patent 5388357 to Malita; US Patent 5410453 to Ruskouski;

US Patent 5459955 to Ruskouski et al; US Patent 5463280 to Johnson;

US Patent 5485145 to Sniff; US Patent 5526236 to Burnes et al;

US Patent 5526236 to Andre et al; US Patent 5539623 to Gurz et al;

US Patent 5542201 to Grondal et al; US Patent 5575459 to Anderson;

US Patent 5611163 to Smith; US Patent 5640792 to Smith et al;

US Patent 5727862 to Wu; US Patent 5775016 to Chien;

US Patent 5797673 to Logan et al; US Patent 5823378 to Evarts et al;

US Patent 5949347 to Wu; US Patent 5988825 to Masters et al;

Art Unit: 2875

US Patent 6023869 to Durbin;

Page 13

US Patent 6019477 to Wegrzyn et al;
US Patent 6026602 to Grondal et al;

US Patent 6036336 to Wu;

US Patent 6072280 to Allen;

US Patent 6106126 to Neustadt;

US Patent 6149283 to Conway et al;

US Patent 6167648 to Dimmick;

US Patent 6183086 to Neubert;

US Patent 6240665 to Brown et al;

US Patent 6268801 to Wu;

US Patent 6367179 to Marsh;

US Patent 6415531 to Ohtsuki et al;

US Patent 6471388 to Marsh;

US Patent 6502956 to Wu;

US Patent 6539657 to Qualis et al;

US Patent 6567010 to Lin et al;

US Patent 6741324 to Kim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (1/13/2005)

OHN ANTHONY WARD
REMANTEEMMER